



NATIONAL TOXICOLOGY PROGRAM

U.S. Department of Health and Human Services

National Institute of Environmental Health Sciences

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DATE: April 2, 2009

TO: The Record for 90-Day Subchronic Study C20114/20114-01; Toxicity Report #72

FROM: Head, NTP Pathology Group

SUBJECT: Results of the Pathology Review of the Oral Mucosa and Tongue of Fischer 344 Rats in the Sodium Dichromate Dihydrate Dosed Water Study

Based on the neoplastic findings in the 2-year study of sodium dichromate dihydrate, the NTP conducted a retrospective analysis of the oral cavity and tongue in the 90-day rat study. Under the direction and guidance of Dr. Ronald Herbert, NTP pathologist, contractor pathologists carried out an additional pathology evaluation and pathology peer review of the tongue and oral cavity for all male and female F344 rats in this study. Using archived tissues, the tongue from each animal was examined grossly and trimmed according to accepted guidelines. The trimmed tissues were embedded in paraffin, sectioned at 5 microns, stained with Hematoxylin & Eosin (H&E) and examined histologically. Further review of the oral cavity was conducted by re-examination of the archived H&E-stained slides of 3 cross-sections of the nasal cavity (taken from 3 anatomically defined sites) each of which contained areas of the palate and buccal cavity.

This pathology review revealed non-neoplastic microscopic lesions in 4 rats. Minimal inflammation was observed in male animals # 4, 9, and 42 (dose groups 0 mg/L, 0 mg/L, and 500 mg/L, respectively) and focal mild dysplasia was found in female animal # 104 (dose group 500 mg/L). No other lesions were observed. These findings are not considered treatment-related.

The reports from this evaluation are in the NTP Archives and the pathology data for these animals has been added to the NTP TDMSE database and are available on the NTP Website (<http://ntp.niehs.nih.gov>). This memo will also be posted on the NTP Website with Toxicity Report #72 (<http://ntp.niehs.nih.gov/go/29184>).

A large black rectangular box redacting the signature of David E. Malarkey.

David E. Malarkey, D.V.M., Ph.D.

cc:
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